

FIG.1

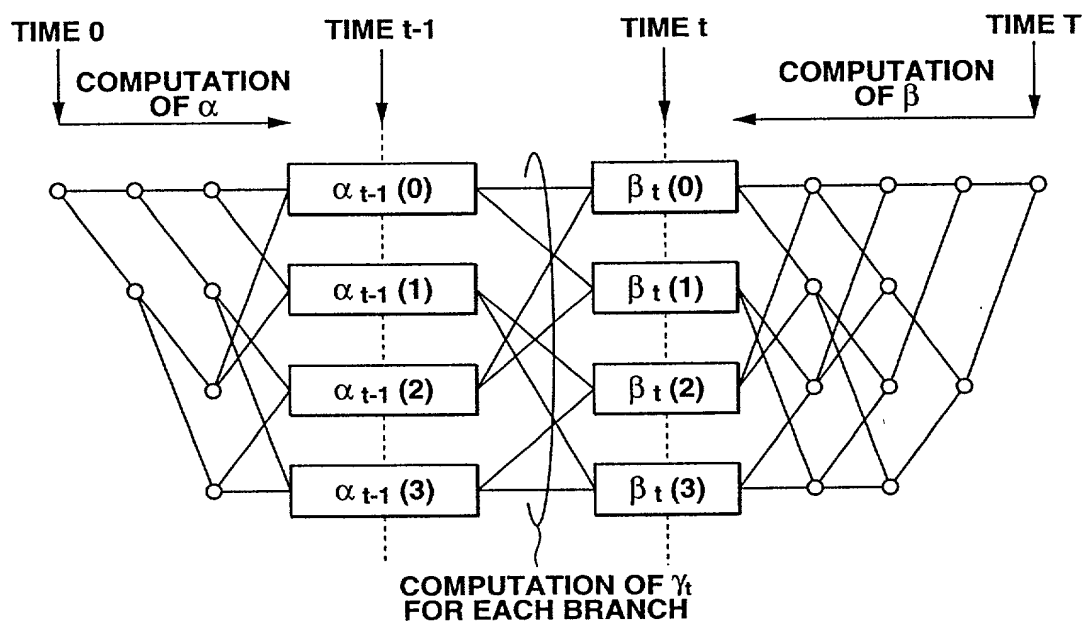
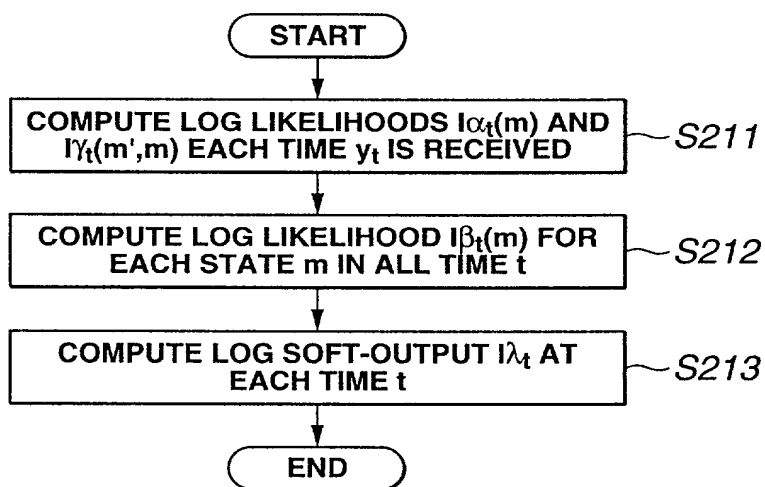


FIG.2

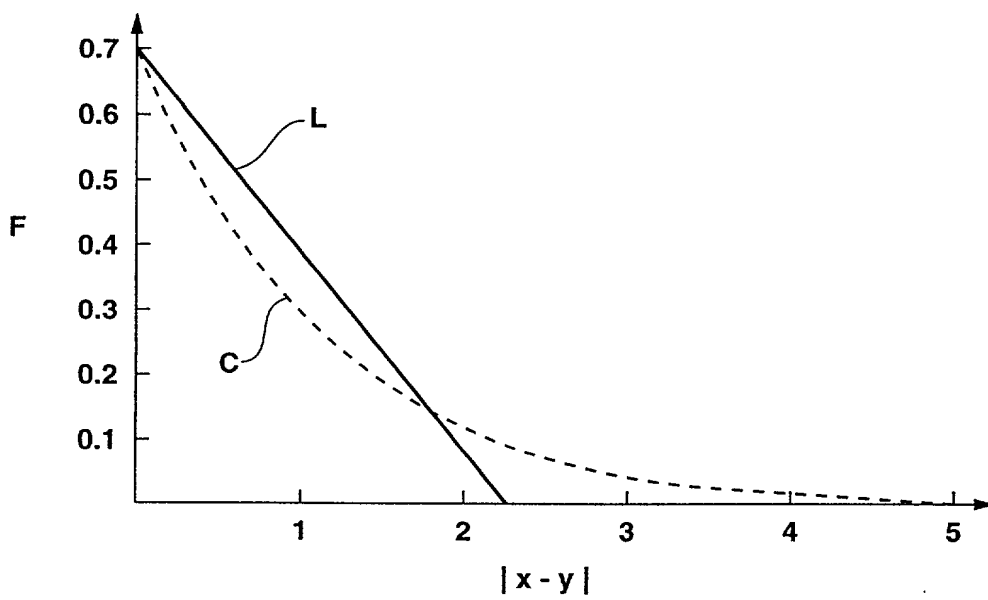
```
graph TD; START([START]) --> S201[COMPUTE PROBABILITIES  $\alpha_t(m)$  AND  $\gamma_t(m',m)$  EACH TIME  $y_t$  IS RECEIVED]; S201 --> S202[COMPUTE PROBABILITY  $\beta_t(m)$  FOR EACH STATE  $m$  IN ALL TIME  $t$ ]; S202 --> S203[COMPUTE SOFT-OUTPUT  $\lambda_t$  AT EACH TIME  $t$ ]; S203 --> END([END]);
```

The flowchart illustrates the second embodiment of the Viterbi algorithm. It begins with a START terminal, followed by three processing steps: S201 (Computing probabilities  $\alpha_t(m)$  and  $\gamma_t(m',m)$  each time  $y_t$  is received), S202 (Computing probability  $\beta_t(m)$  for each state  $m$  in all time  $t$ ), and S203 (Computing soft-output  $\lambda_t$  at each time  $t$ ). The process concludes at an END terminal.

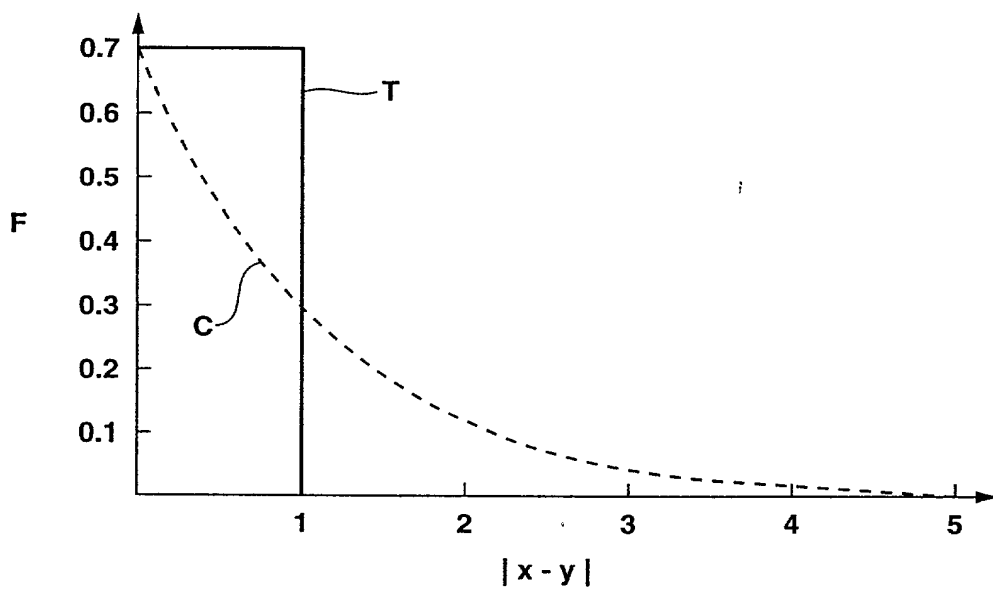
**FIG.3**



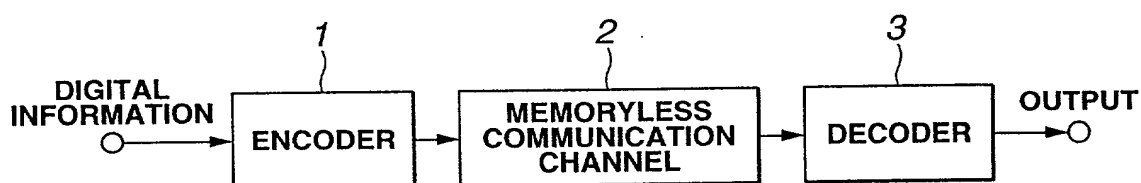
**FIG.4**



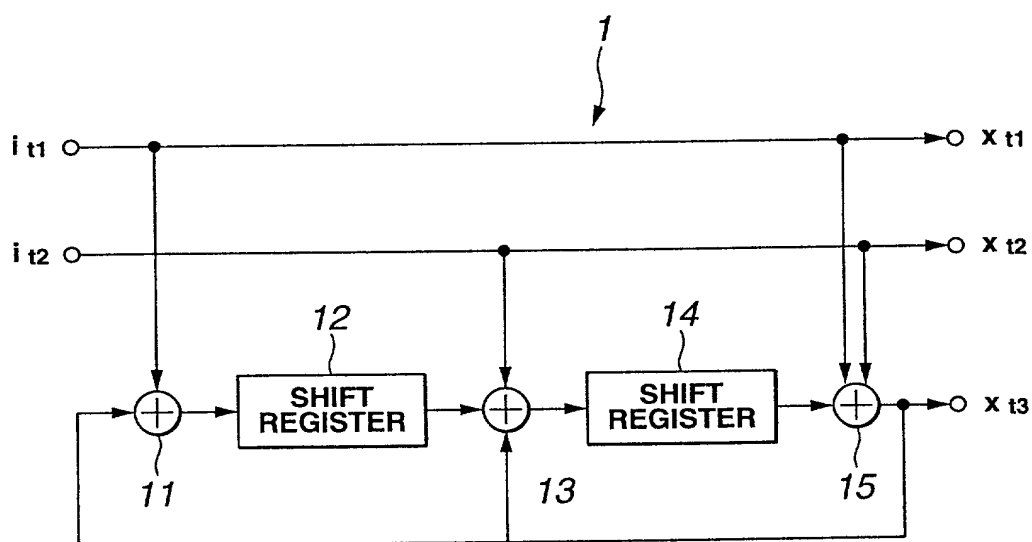
**FIG.5A**



**FIG.5B**



**FIG.6**



**FIG.7**

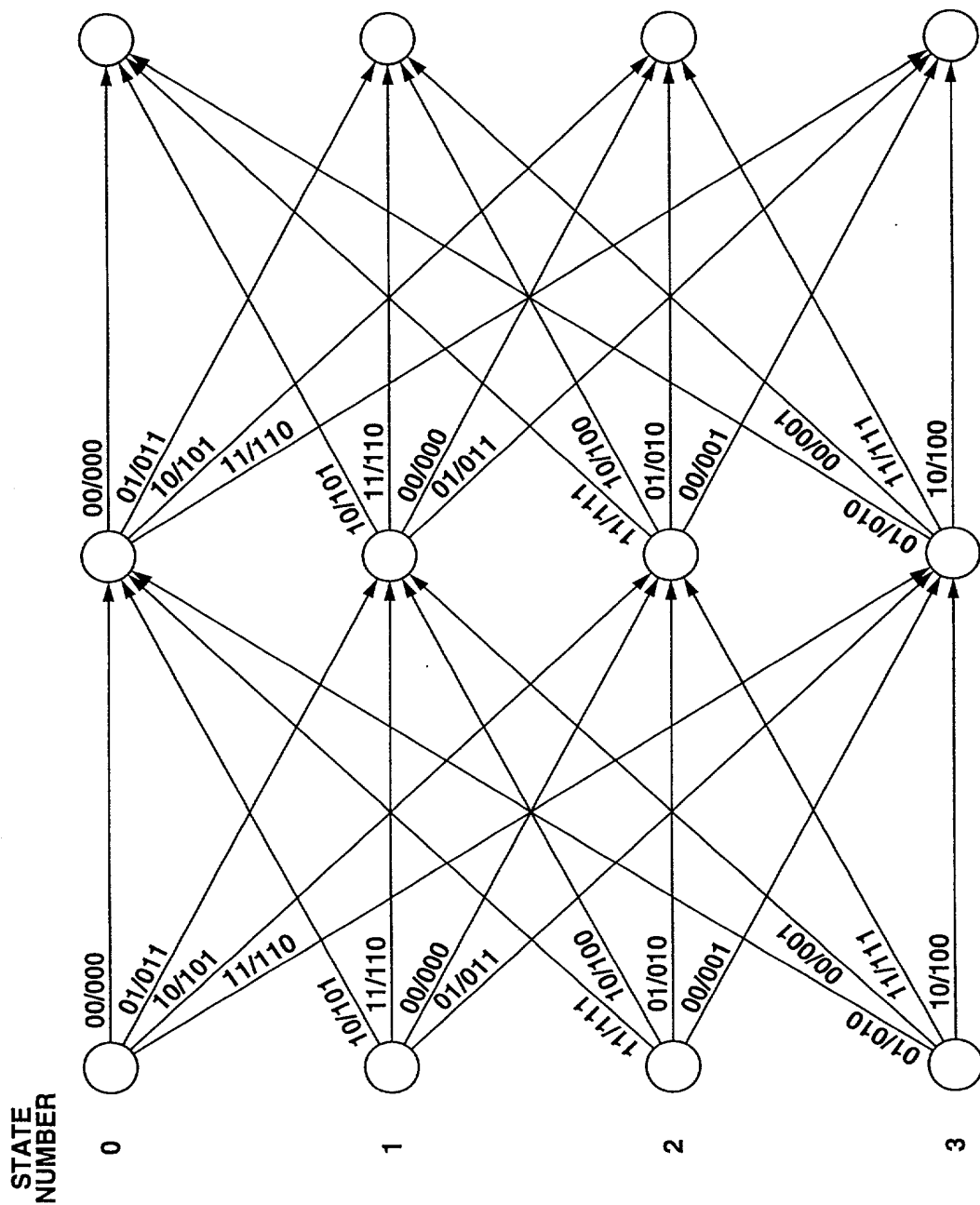


FIG.8

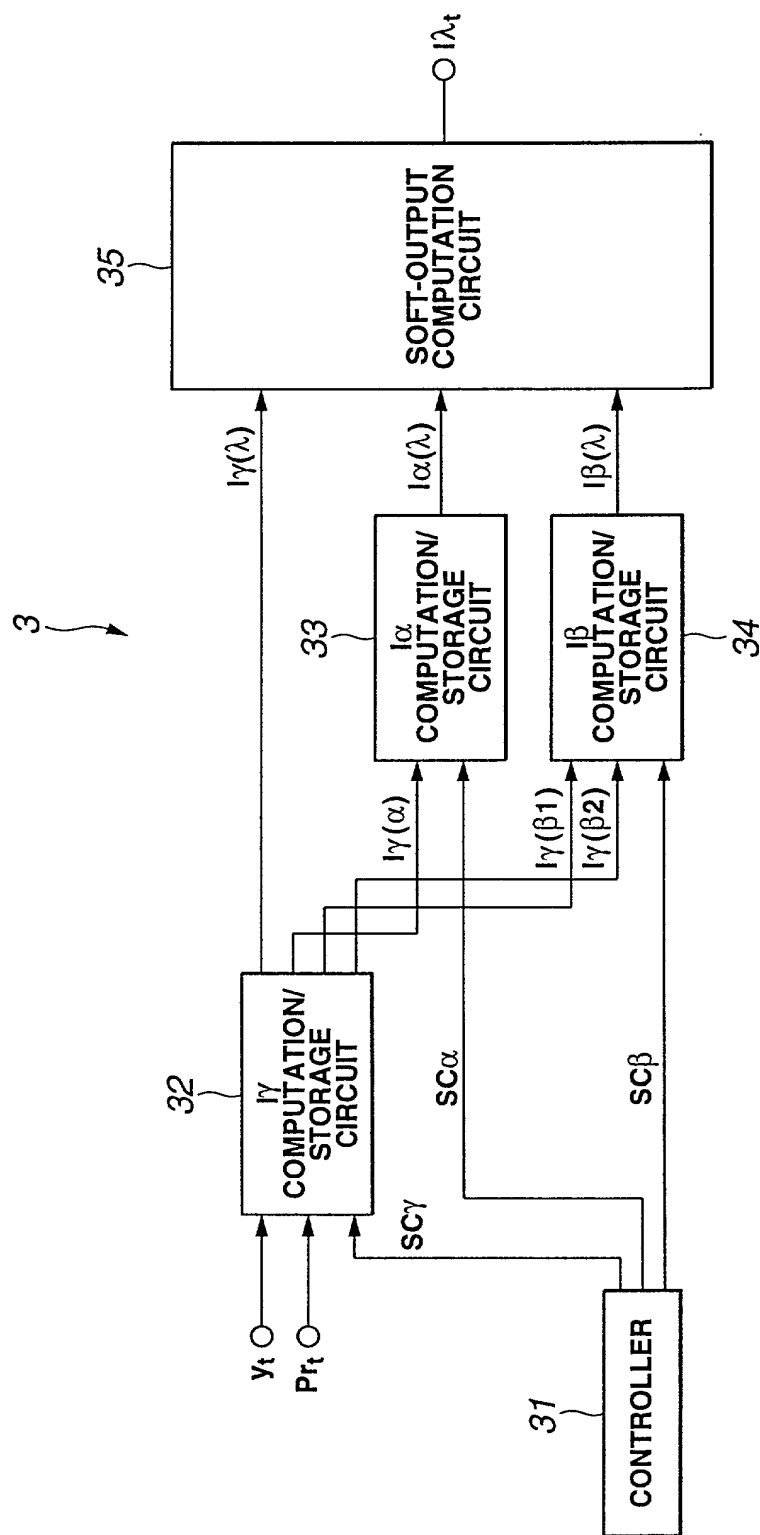


FIG.9

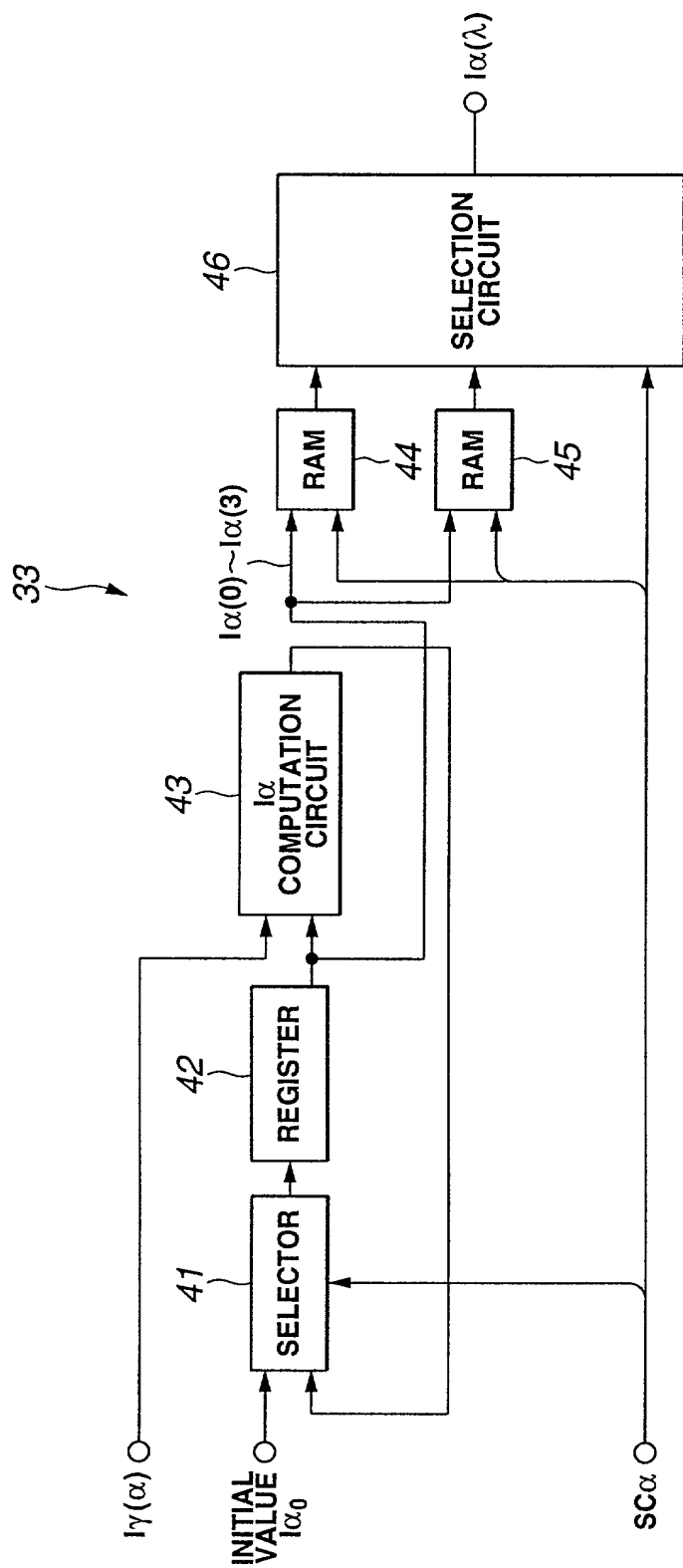


FIG.10

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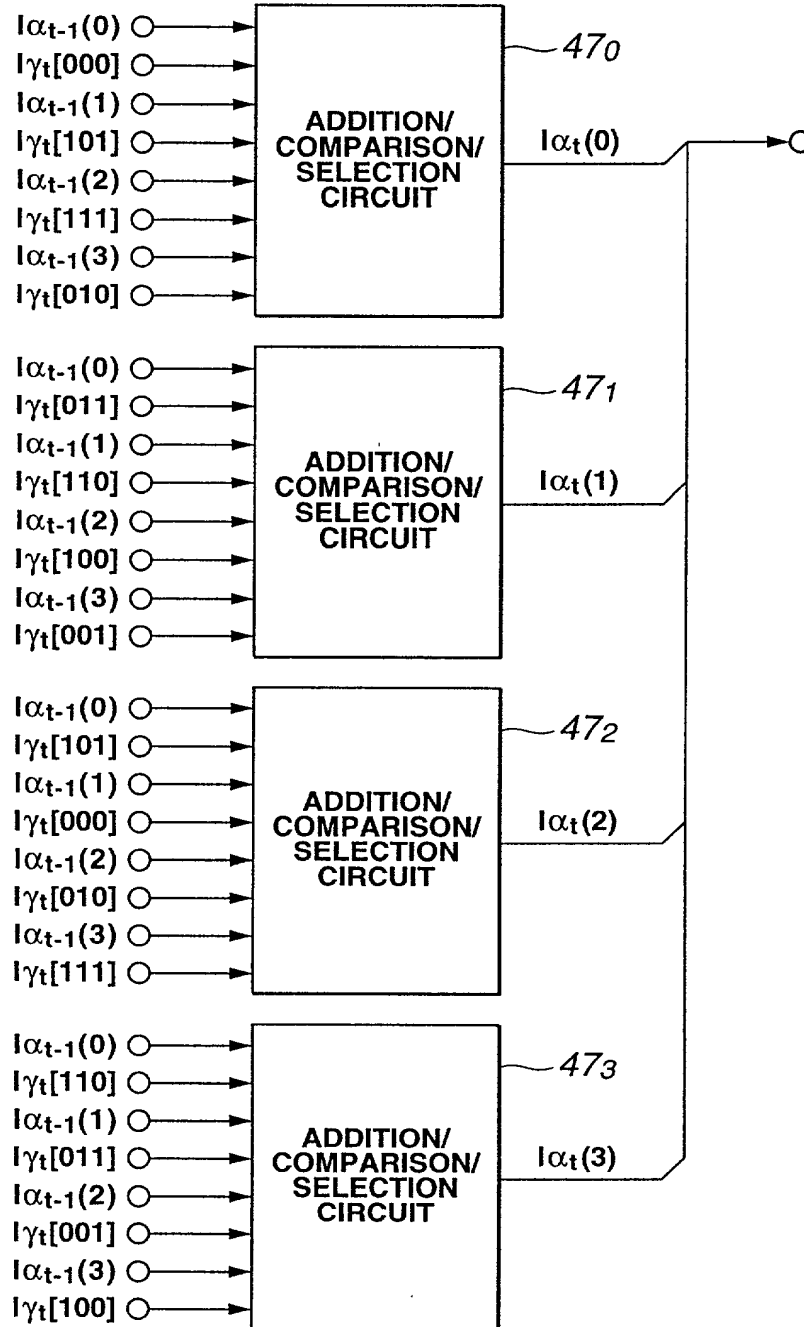


FIG.11

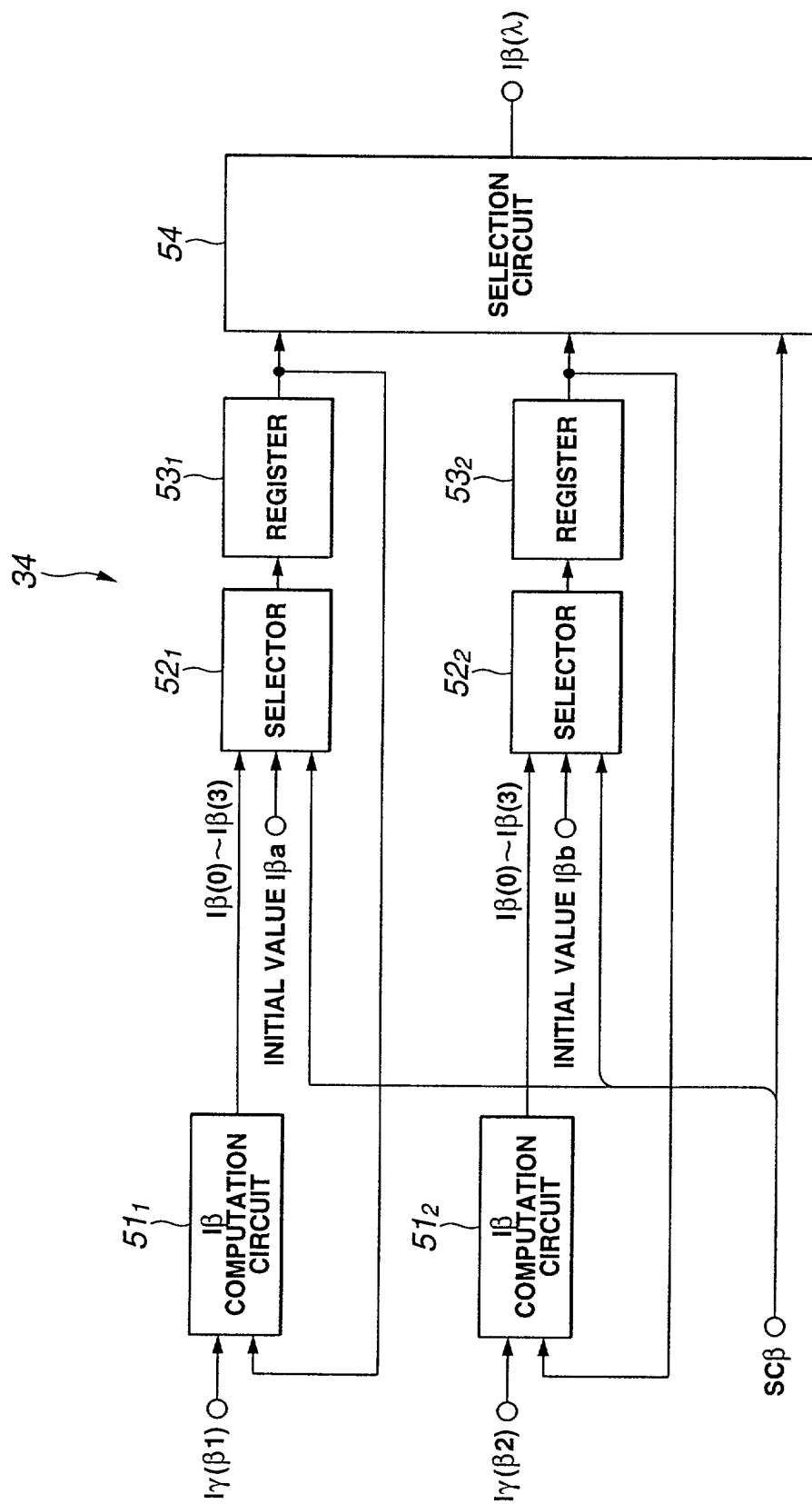
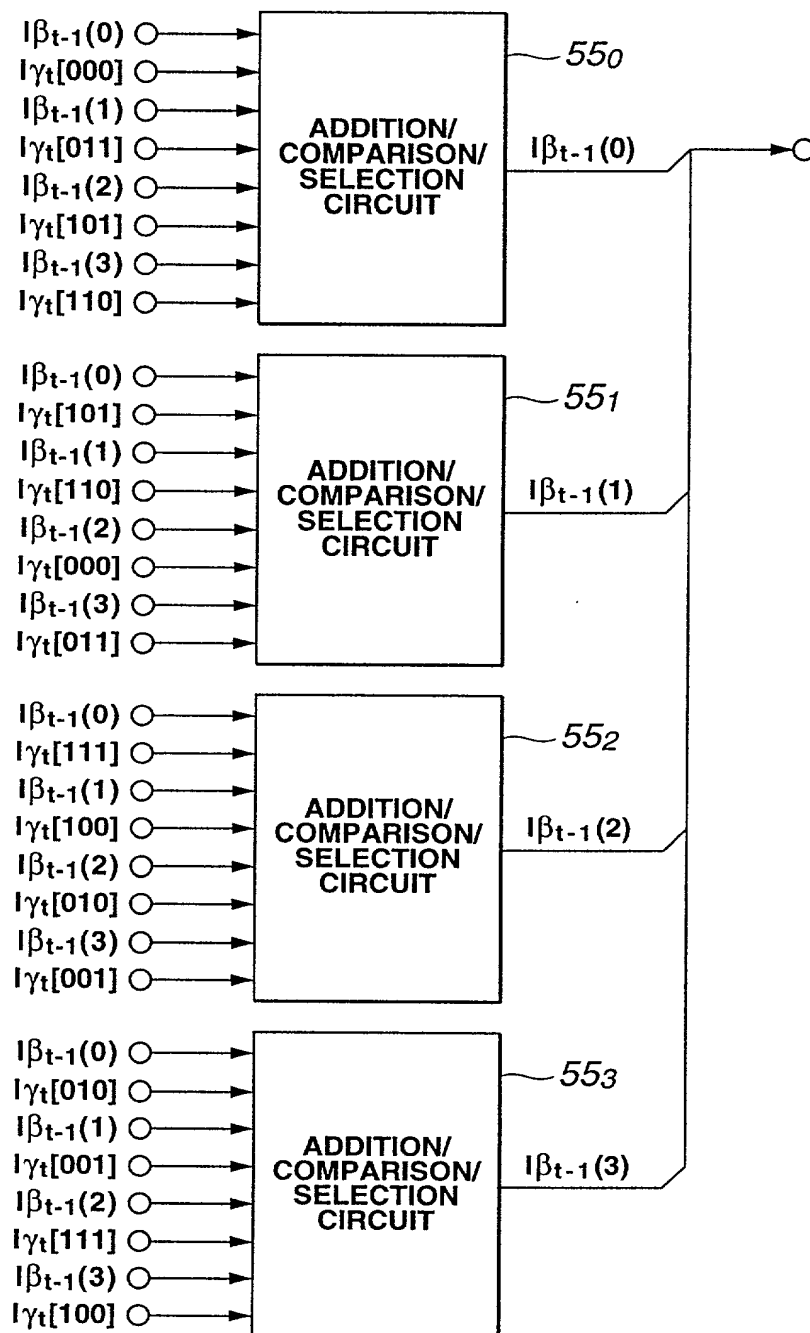


FIG.12



**FIG.13**

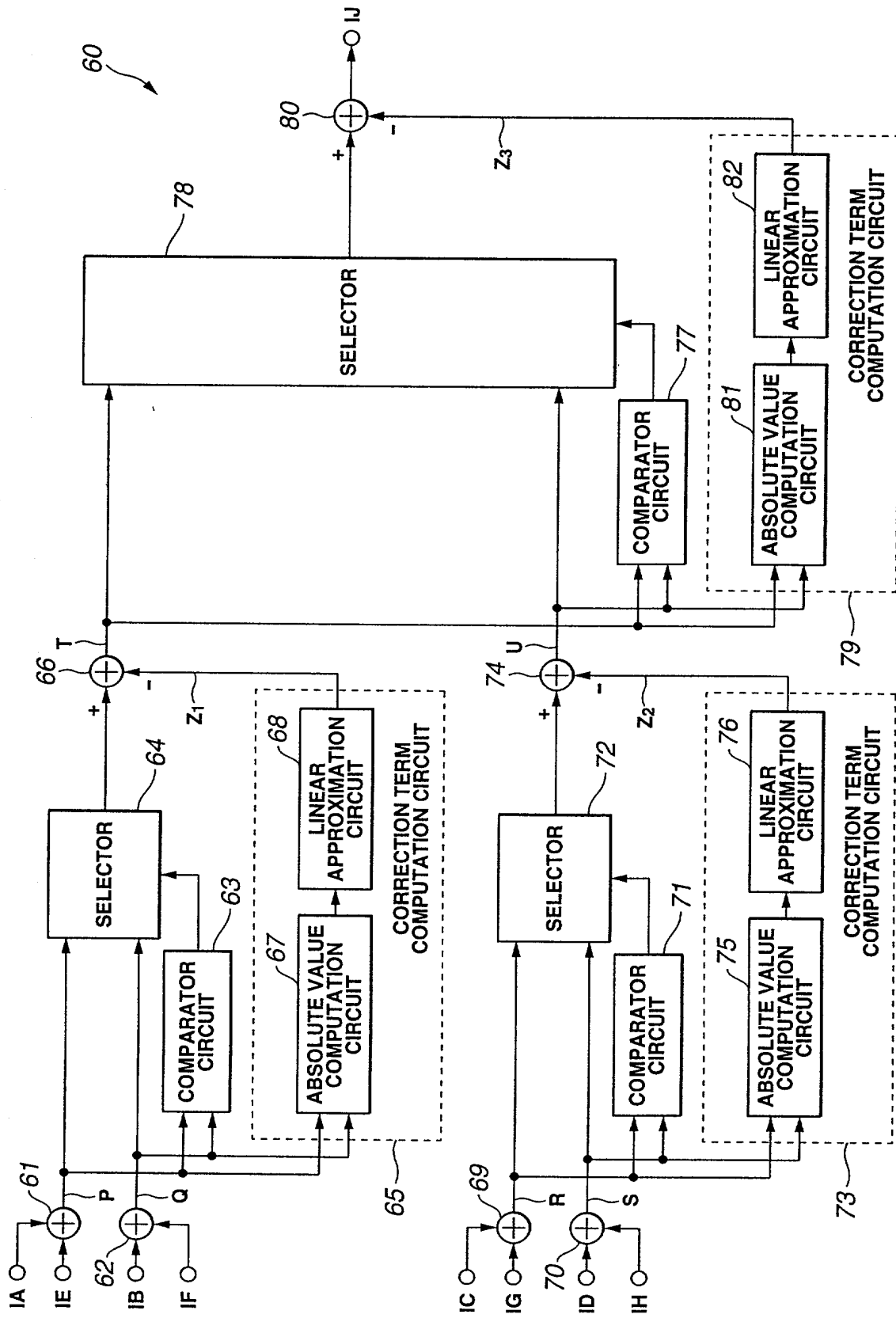


FIG.14

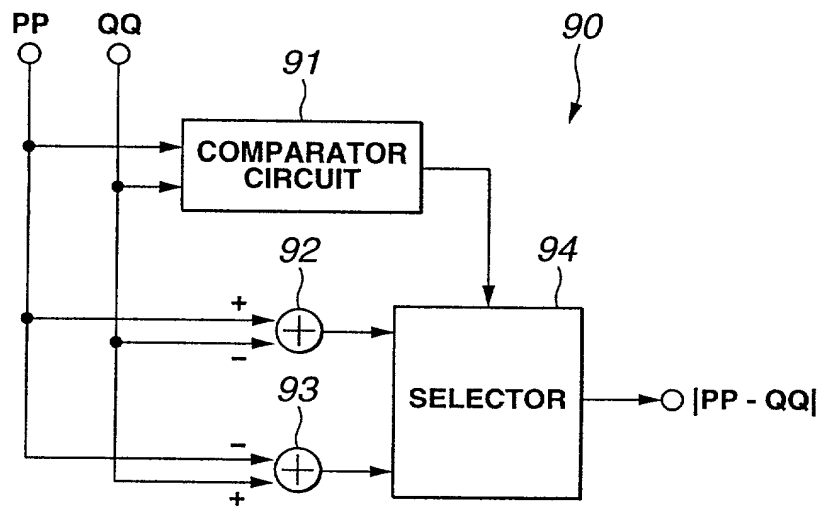


FIG.15

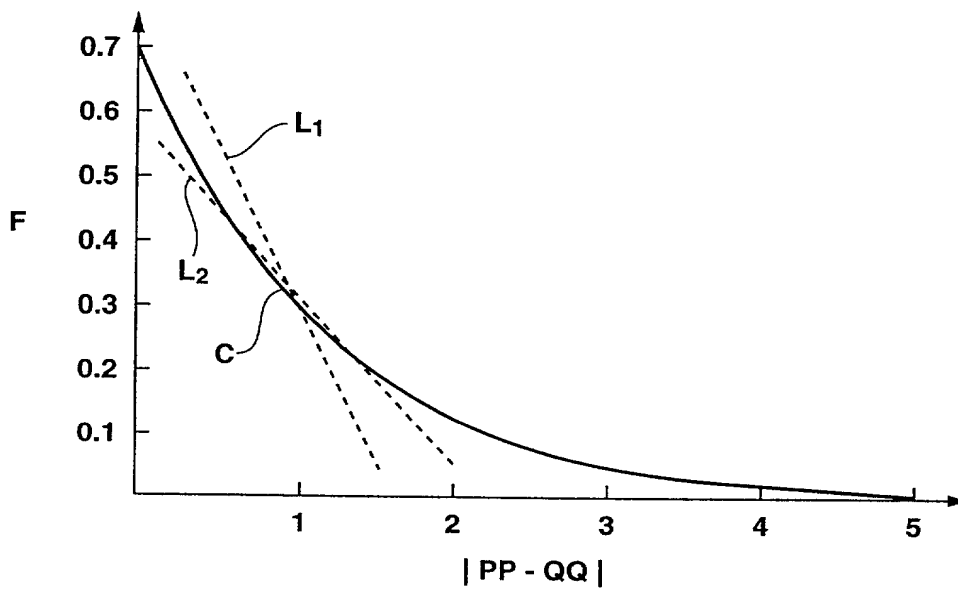


FIG.16

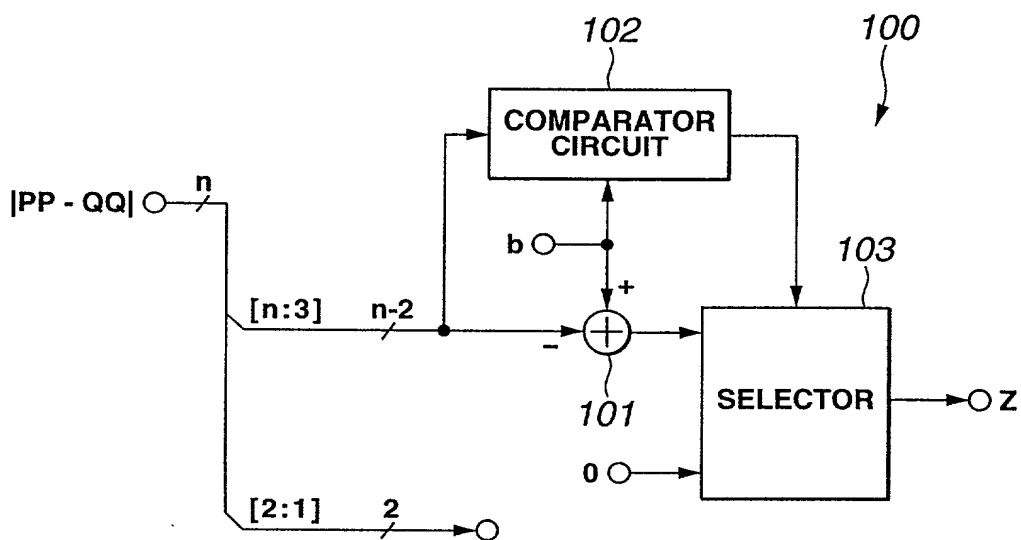


FIG.17

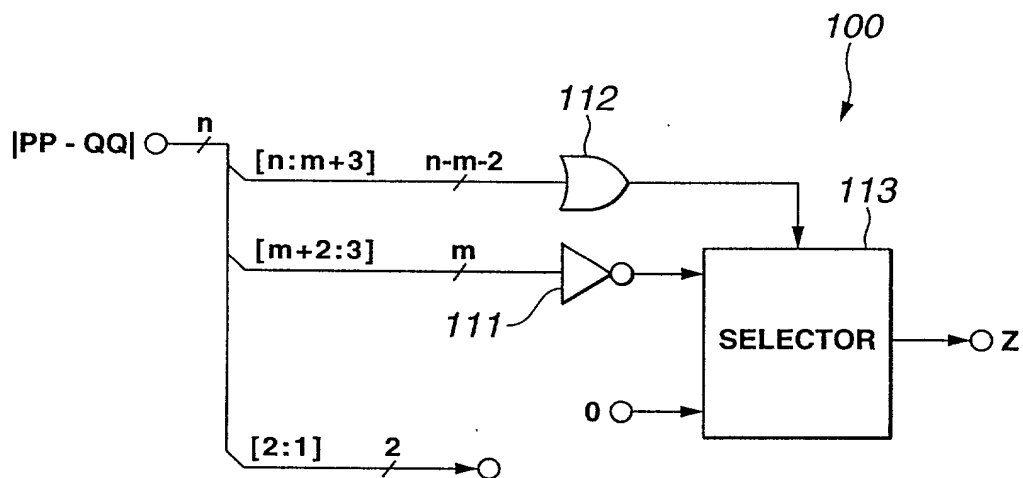


FIG.18

FIG.19A

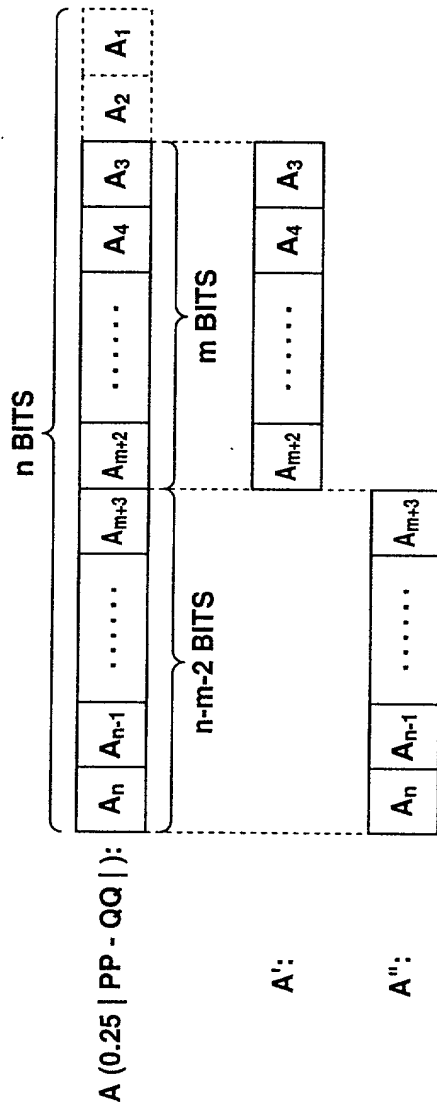
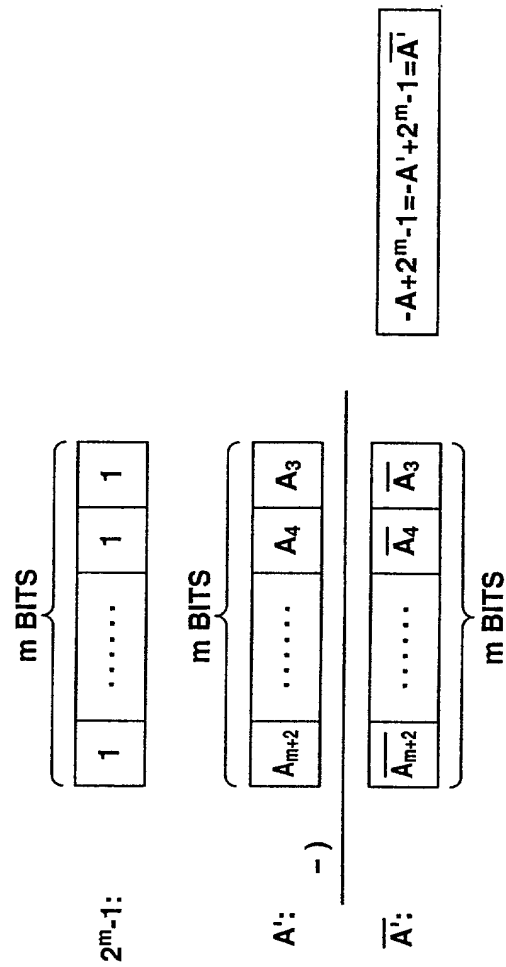


FIG.19B



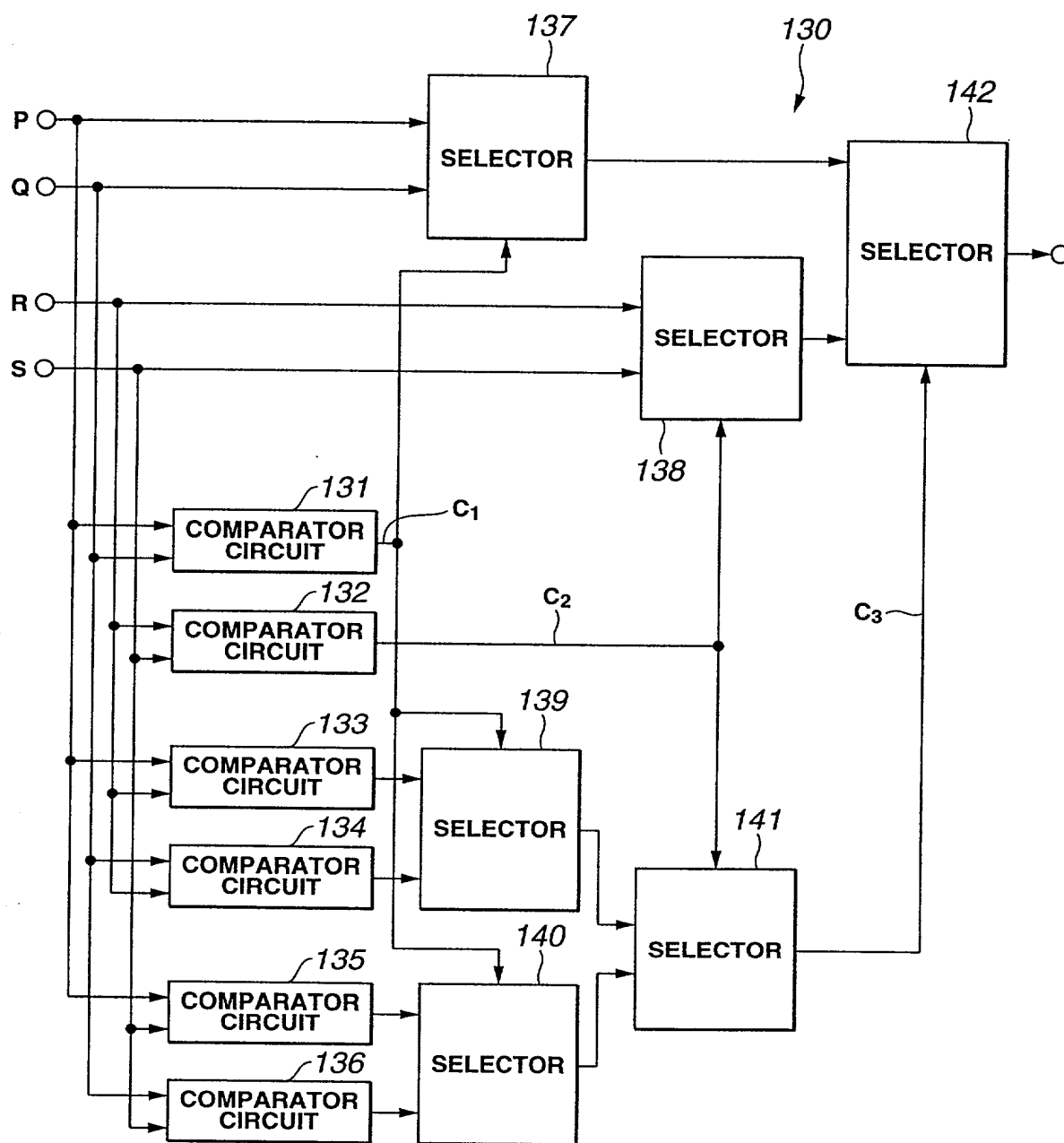
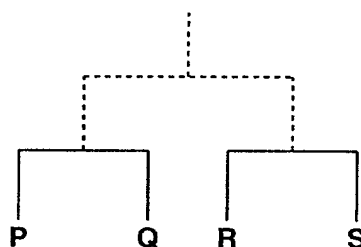
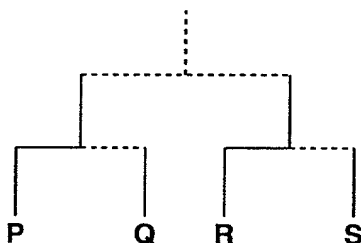


FIG.20

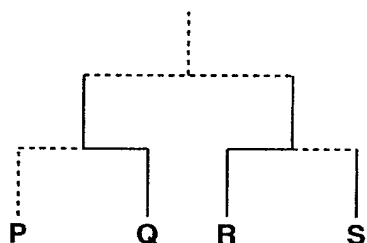
**FIG.21A**



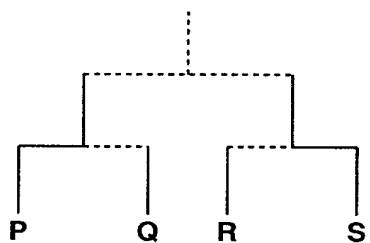
**FIG.21B**



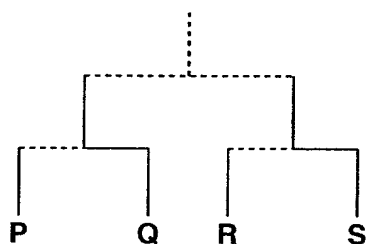
**FIG.21C**

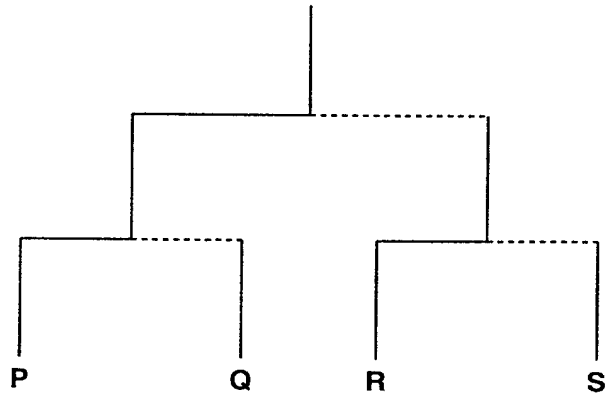


**FIG.21D**

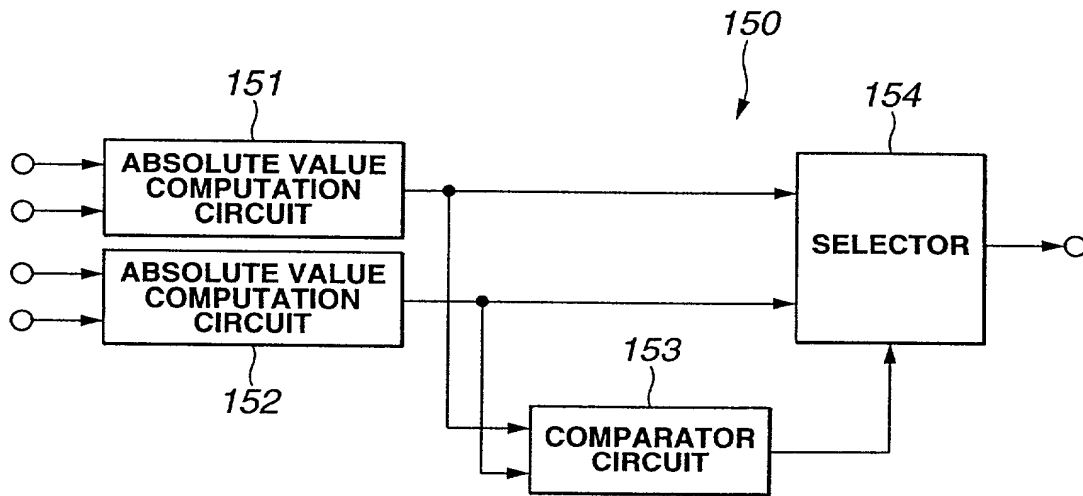


**FIG.21E**

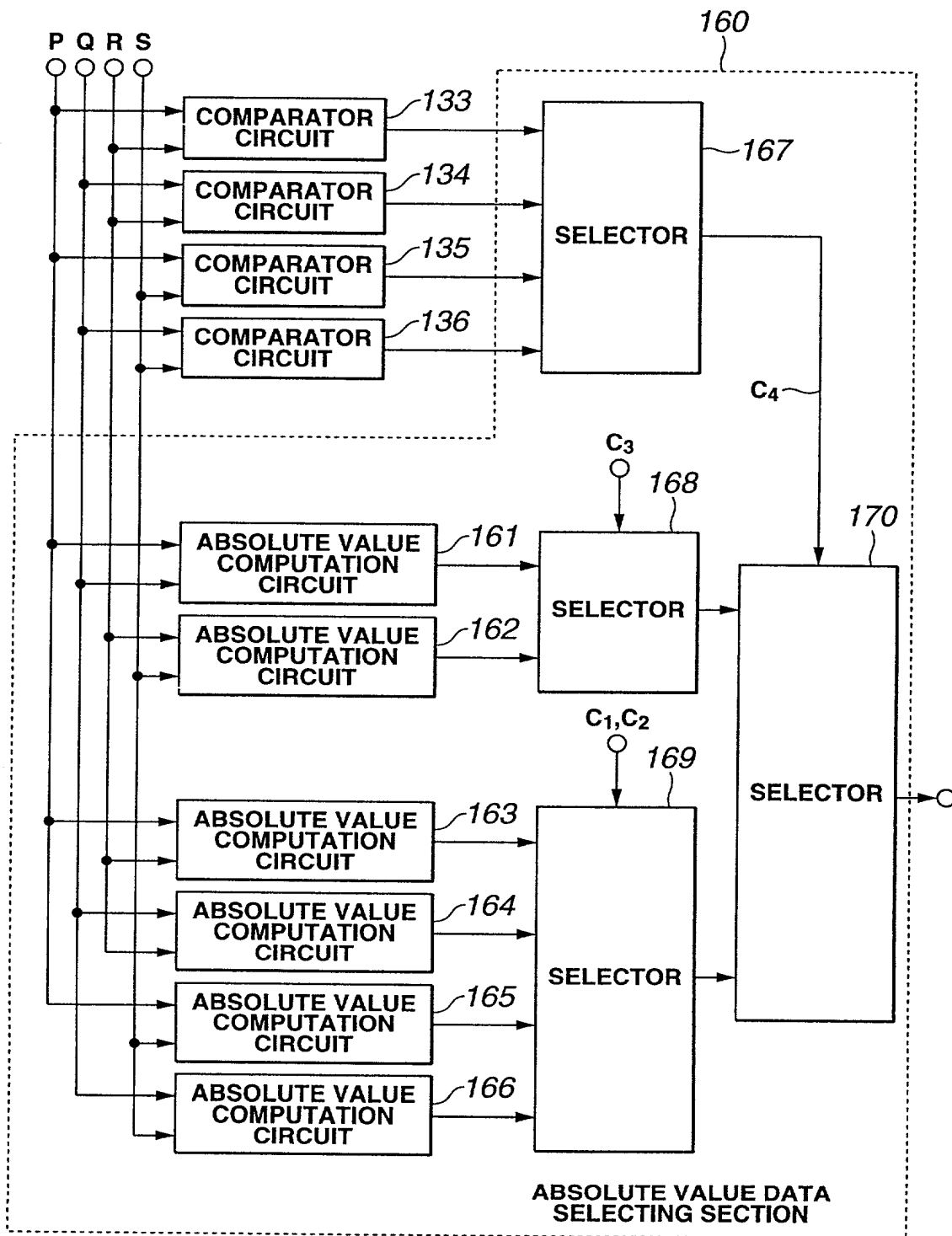




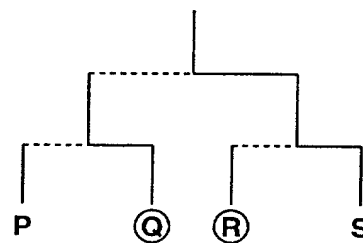
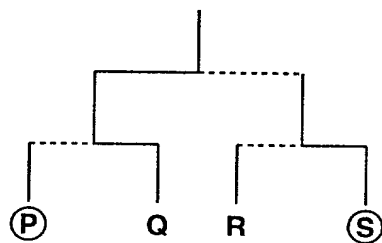
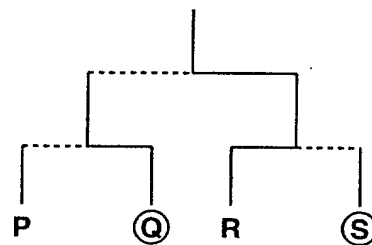
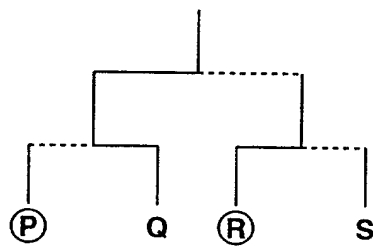
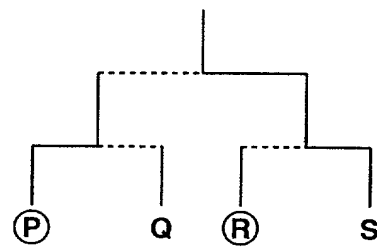
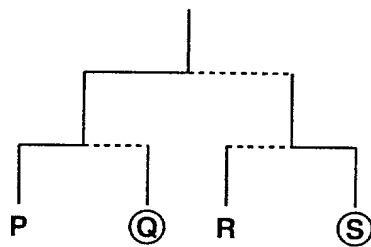
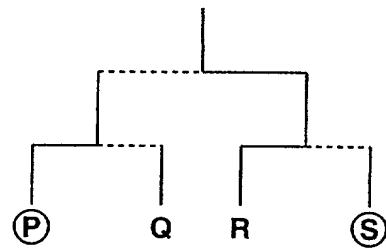
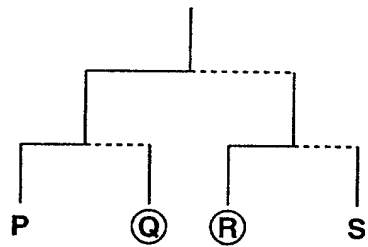
**FIG.22**

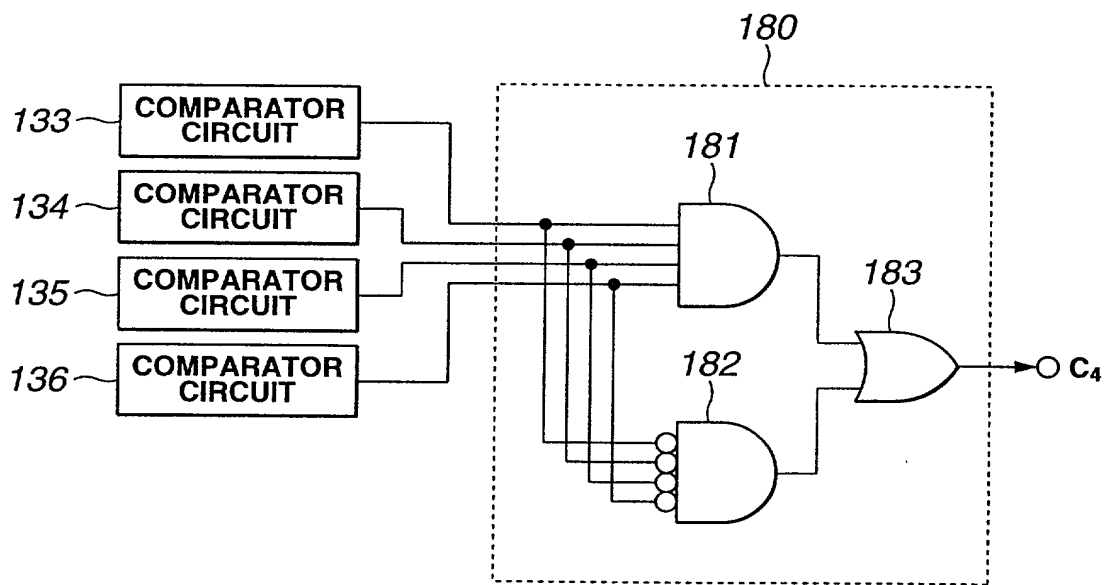


**FIG.23**



**FIG.24**





**FIG.26**

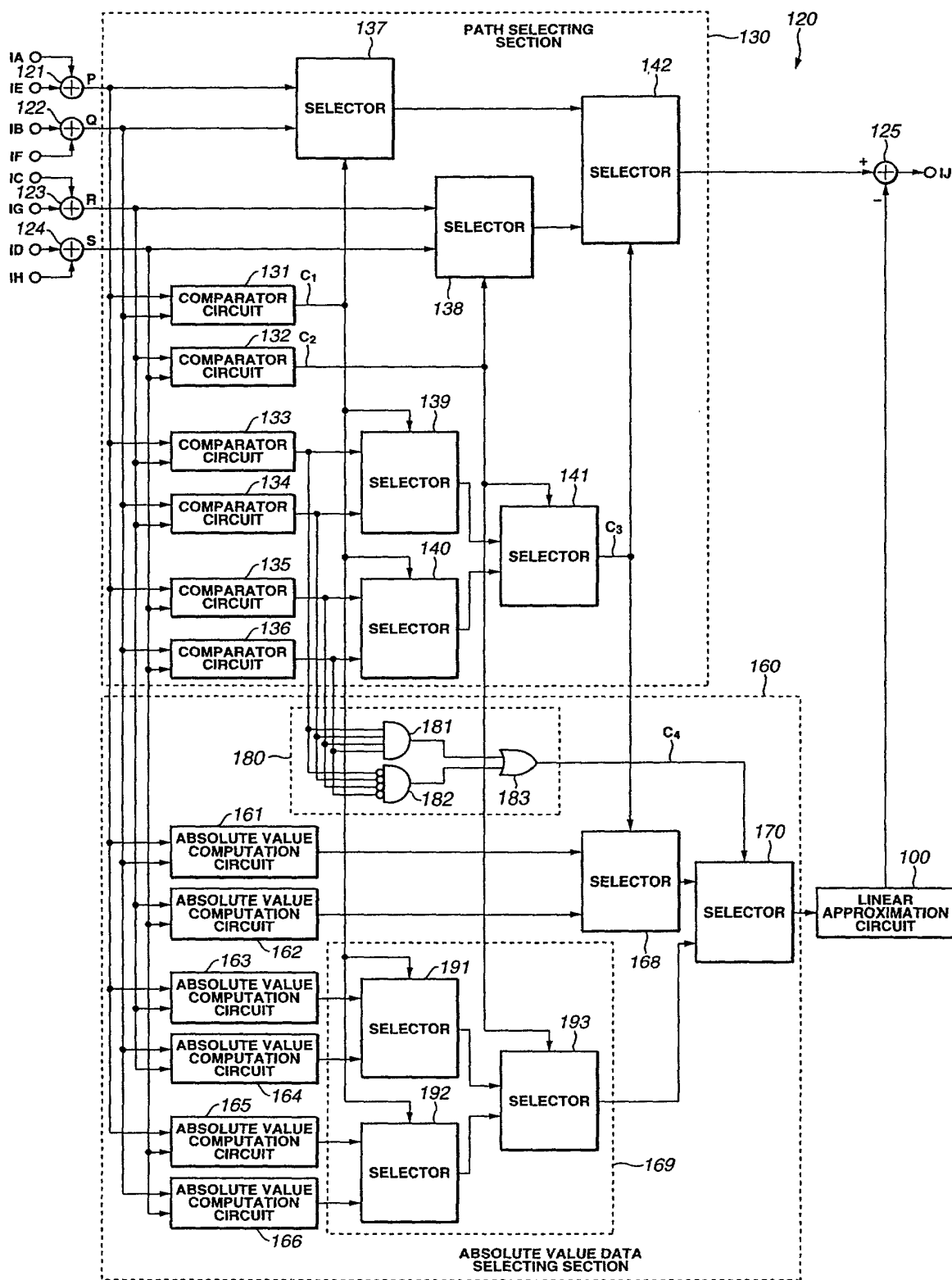


FIG.27